

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-26. (Cancelled)

27. (Previously amended): A method for removing volatile compounds from air, which method comprises passing the air over an adsorber comprising a monolithic porous carbon to adsorb the volatile compounds, and then passing an electric current through the adsorber to heat the adsorber and drive off at least some of the adsorbed compounds wherein the monolithic porous carbon is made by partially curing a phenolic resin to a solid, comminuting the partially cured resin, sintering the comminuted resin so as to produce a form-stable sintered product and carbonising the form-stable sintered product.

28. (Previously amended): A method as claimed in claim 27 wherein the porous carbon monolith has a resistivity of between 0.1 and 50 ohms/m.

29. (Previously amended): A method as claimed in claim 27 wherein the porous carbon monolith has a cell structure wherein the channel size is between 0.5 and 1 mm and the wall thickness is between 0.5 and 1 mm and having an open area of between 30 and 60%.

30 (Previously amended): A method as claimed in claim 27 wherein the porous carbon monolith has a surface area of at least 700m²/g.

31 (Currently amended): A method as claimed in claim 27 wherein the absorber comprises an adsorber bed comprising a plurality of monolithic porous carbon monoliths electrically connected together in series and/or in parallel.

32 (Previously amended): A method as claimed in claim 31 wherein a gas flows through the plurality of monoliths.

33. (Previously amended): A method as claimed in claim 27 wherein the porous carbon monolith is formed of a plurality of shorter lengths of monolith separated by spaces.

34 (Previously amended): A method as claimed in claim 33 wherein the ends of the shorter lengths of monoliths are connected with a metal connector and the ends of the monoliths which are connected are surrounded with a gas impervious plastic which forms a conduit between the ends of the monoliths.

35 (Previously amended): A method as claimed in claim 34 wherein the monolith end connection is directly soldered to the metal connector.

36 (Previously amended): A method as claimed in claim 34 wherein the monolith end connection is directly soldered to the metal connector and the ends of the carbon monoliths are copper plated.

37 (Previously amended): A method as claimed in claim 27 wherein the absorbed compounds that are driven off from the porous carbon monolith pass through a granular carbon bed.

38 (Previously amended): A method as claimed in claim 33 wherein the absorbed compounds that are driven off from the porous carbon monolith pass through a granular carbon bed.

39 (Previously amended): A method as claimed in claim 37 wherein the granular bed comprises one of granular or extruded activated carbon of particle size of 0.1 mm to 2 mm and has a volume of up to 15% of the volume of the porous carbon monolith.

40 (Previously amended): A method as claimed in claim 27 wherein the absorber comprises a plurality of adsorbers and further comprising the steps of, when at least one adsorber has a gas stream containing VOCs passing over it, heating at least one other adsorber by having an electric current passed through it, and when the absorbed compounds that are driven off from the adsorbing bed reaches a predetermined limit, switching the beds.

41 (Previously amended): Apparatus for the regenerable adsorption of VOCs, the apparatus which comprises an adsorber bed which comprises a monolithic porous carbon, wherein the monolithic porous carbon is made by partially curing a phenolic resin to a solid, comminuting the partially cured resin, sintering the comminuted resin so as to produce a form-stable sintered product and carbonising the form-stable sintered product; a gas inlet and a gas outlet for the adsorber bed, whereby gas or vapor can be passed over the adsorber bed, and means for passing an electric current through the adsorber bed.

42 (Previously amended): Apparatus as claimed in claim 41 wherein the monolithic porous carbon has a resistivity of between 0.1 and 50 ohms/m.